

## GENERAL INSTRUCTIONS

**MSFC Form 248, Test Preparation Sheet (TPS)**, is a work authorization document used to perform tests or other work not covered by another approved procedure, Discrepancy Record (MSFC Form 460), or another authorized method. These instructions form minimal requirements for completion of MSFC Form 248; it is the responsibility of the using organizations to define additional instructions, if applicable. Procedures for redlines, modifications, or addition/deletion of steps following approval of the TPS, if authorized, shall be defined in organizational instructions, or in Block 18.

A **Type A TPS** is used for permanent flight hardware, facility, or special test equipment configuration changes. All drawings, component listings, etc. shall be updated accordingly. A Type A TPS shall be annotated to update the reference documentation. All configuration changes for flight hardware and GSE shall conform to the requirements of the Project Plan.

A **Type B TPS** is used for all other case.

**Continuation Sheets:** Additional steps not shown on this form shall be attached, and appropriately numbered and referenced. MSFC 248-1 may be used for this purpose.

**Run:** Each uniquely numbered TPS shall be run no more than once, i.e. only one "as-run" copy.

**Approval Requirements:** Approval signatures shall be indicated in blocks 22 and/or 23. The minimum approval requirements are as follows:

### Minimum TPS Approvals

All Test Programs	TPS-A	TPS-B
Design Engineer(s)	P or A	P or C
Test Engineer	P or A	P or A
Lead Engineer (if applicable)	A	C
Preparing Organization Approvals	(1)	(1)
Other Approvals	(2)	(2)
Quality	(3)	(3)
Safety	(4)	(4)
Environmental Health	(5)	(5)

**P = Prepare   A = Approve   C = Concurrence**

### Notes:

- \* Concurrence signature are not required, but may be provided for record.
- (1) Organizational Issuances may indicate additional signature requirements.
- (2) Project documentation may indicate additional signature requirements for hardware or software controlled by a specific project.
- (3) Quality approval is required for quality sensitive tests (Block 5)
- (4) Safety approval is required for hazardous operations (Block 5).
- (5) Environmental Health approval is required for operations requiring PPE that in not covered by existing and approved Operating Procedures, Test Procedures, or Job Hazard Analysis.

## DETAILED STEP-BY-STEP INSTRUCTIONS

BLOCK	ENTRY EXPLANATION
1	Check Type A, if the TPS will implement a permanent configuration change. If Type A is checked, include "update documentation step" prior to last item. Check Type B for all others.
2	Unique TPS number assigned from the preparing organizations log. Number shall include organizational code in order to assure uniqueness center wide.
3	Enter Page# and Total Page#
4	Enter short title of the work to be performed.
5	<p>Check "YES" or "NO" for each of the following categories to indicate whether the operations covered by this TPS are:</p> <p><b>Quality Sensitive</b> - Check "YES" if the operations performed include those as designated as requiring S&amp;MA approvals, surveillance, and/or monitoring, as dictated by the appropriate Quality Plan, Test Plan, Test Request, or as determined necessary by the test engineer.</p> <p><b>Safety Critical</b> - Check "YES" if the hazards associated with these operations have a reasonable likelihood of causing injury or occupational illness, and/or damage to facilities, systems, or hardware. Operations that involve Lockout/Tagout shall be included. If not sure, contact a safety professional for guidance.</p> <p><b>Limited Life</b> - Check "YES" if the operations performed involve equipment requiring time/ cycle recordkeeping as a method of ascertaining remaining usable equipment life.</p>
6	Experiment/Model Number - Enter experiment name.
7	Enter date TPS was prepared.
8	Enter anticipated date to begin work.
9	Enter the applicable Drawing, TCP(S), or Part NO(s), if required.
10	Enter Organization Code of the performing organization.
11	System affected by TPS.
12	Enter the reason for performing the work.
13/14	Description of work to be performed, list sequentially. Instructions to be sufficiently detailed to be thoroughly understood by engineering, performing technicians, and inspection personnel. For a Type A TPS, the next-to-last step shall denote the required documentation changes. The department/initiator will devise a method to indicate the last step on the TPS so that steps cannot be added after approvals or acceptance are obtained.
15	Performing technician annotates to signal completion of each step.
16	Stamped and dated by Contractor Quality (when Contractor performed).
17	NASA Quality stamps and dates (if required - see block 5.)
18	Enter special information concerning the performance of the work that will not be included in Block 14.
19	Enter the preparer's name.
20	For Non-Quality Sensitive TPS, final acceptance is required by the Test Conductor. For TPS approved by NASA Quality, final acceptance is required by NASA Quality, unless otherwise specified.
21	Enter date of the final acceptance.
22/23	Signatures of approval shall be indicated in these blocks.

MSFC Form 248 (Rev. October 2004) Informed